

WHAT IS CLAIMED IS:

1. A method of qualifying a network comprising the steps of:  
defining a network based on applications running on a network;  
acquiring network test data by testing the network in response to  
defining the network; and  
comparing the network test data to defined limits.
2. A method of qualifying a network as set forth in claim 1, wherein the  
step of defining the network includes the step of identifying components in the  
network supporting the applications.
3. A method of qualifying a network as set forth in claim 1, wherein the  
method of qualifying the network comprises the step of performing a design  
qualification.
4. A method of qualifying a network as set forth in claim 1, wherein the  
method of qualifying the network comprises the step of performing an  
installation qualification.
5. A method of qualifying a network as set forth in claim 1, wherein the  
method of qualifying the network comprises the step of performing an  
operation qualification.
6. A method of qualifying a network as set forth in claim 1, wherein the  
step of acquiring network test data by testing the network is performed using  
network troubleshooting tools.

7. A method of qualifying a network as set forth in claim 1, wherein the step of acquiring network test data by testing the network is performed automatically.

8. A method of qualifying a network as set forth in claim 1, wherein the step of acquiring network test data by testing includes applying synthetic loads to simulate short-duration stresses.

9. A method of qualifying a network as set forth in claim 1, wherein the step of acquiring network test data includes generating traffic to simulate short-duration stresses.

10. A method of performing design qualification comprising the steps of:

defining a network based on applications running on the network, the network including a network design;

testing the network in response to defining the network; and

determining suitability of the network design to run the applications in response to testing the network.

11. A method of performing design qualification as set forth in claim 10, wherein determining suitability of the network comprises determining if the network is capable of supporting the applications.

12. A method of performing design qualification as set forth in claim 10, wherein determining suitability of the network comprises determining if the network is capable of supporting critical dependencies.

13. A method of performing design qualification as set forth in claim 10, wherein determining suitability of the network comprises determining if identified components are isolated in the network.

14. A method of performing design qualification as set forth in claim 10, wherein determining suitability of the network comprises determining if identified components have the appropriate security.

15. A method of performing installation qualification comprising the steps of:

defining a network based on applications running on the network, the network including components organized in a topology;  
performing measurement of the components; and  
verifying the topology in response to performing the measurement.

16. A method of performing installation qualification as set forth in claim 15, wherein the step of performing measurement of the components include measuring characteristics of the components that define performance of the components.

17. A method of performing installation qualification as set forth in claim 15, wherein the measurement of the components is performed using troubleshooting tools.

18. A method of performing operation qualification comprising the steps of:

defining a network based on applications running on the network;  
generating traffic on the network; and  
differentiating between operation of the application and operation of the network in response to generating the traffic on the network.

19. A method of performing operation qualification as set forth in claim 18, wherein the step of generating the traffic includes generating synthetic stress loads that exercise at least one of the applications.

20. A method of performing operation qualification as set forth in claim 18, wherein the step of generating the traffic includes generating synthetic stress loads that exercise a component on the network.

21. A computer product, comprising:

computer readable instructions causing a computer to define a network based on applications running on a network;  
computer readable instructions causing a computer to acquire network test data by testing the network in response to defining the network; and  
computer readable instructions causing a computer to compare the network test data to defined limits.

22. A computer program embodied on a carrier wave, the computer program comprising:

instructions causing a computer to define a network based on applications running on the network;  
instructions causing a computer to acquire network test data by testing the network in response to defining the network; and  
instructions causing a computer to compare the network test data to defined limits.